PROGRESS

OF

MEDICAL SCIENCE.

THERAPEUTICS.

UNDER THE CHARGE OF

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CHLORAMIDE.

DR. KNY, of Strasburg, has made a careful study of the action of chloramide, beginning with observations of its influence upon animals. He found that it exerted a marked hypnotic action upon rabbits without exciting any undesirable symptoms; experiments were also made to test the extent of its influence upon the circulation. Since chloral is known to have a depressing action on the heart, Dr. Kny determined to compare the action of these two hypnotics upon the circulation. He found that the blood-pressure was but little diminished, compared with the marked depression caused by chloral, and he inferred that chloramide has but a slight influence upon the heart.

After such a preliminary study of the drug it was used upon patients suffering from insomnia, and in such cases as had already obtained relief from chloral. It is not so energetic a hypnotic as chloral; they are related to each other in about the proportion of thirty grains of chloral to forty-five grains of chloramide. Beside having the larger dose (both of those given are maximum doses), chloramide is the more deliberate in producing sleep. On the average, sleep follows in about half an hour, while with chloral it comes on in about fifteen minutes. The sleep from chloramide is deeper and more refreshing; its duration varies from six to ten hours. The patient rises in the morning with a clear head and free from digestive disturbance. It is a far less irritating substance than chloral, is free from any disagreeable taste, and, what is of more importance, has far less action on the heart.

Chloramide is thought to be decomposed in the blood into chloral and formamide, as large amounts of uro-chloralic acid were found in the urine of a dog which had taken 180 grains of chloramide. The slight action of the drug upon the circulation is explained upon two grounds: that the chloramide is decomposed in the blood so slowly that only a small quantity of chloral is active at any given moment, and that the formamide, in common with all other members of the NH_2 group, is a stimulant to the vaso-motor centre in the medulla, and thus acts to raise the blood-pressure. Dr. Kny finds that patients prefer chloramide to sulphonal, which is much slower in its action, though in special cases sulphonal may possibly be found more suitable than chloramide.—*Therapeutische Monatshefte*, August, 1889.

After using chloramide as a hypnotic in sixteen cases, DR. LETTOW is of the opinion that we have in this drug a useful, though not always certain, hypnotic. It has no action on the pulse, respiration, or temperature, and is to be preferred to some others of its class; the unpleasant accompaniments are slight headache and dizziness, but these symptoms do not often occur. It is best given one to one and a half hours before retiring, and in an enema.—*Wiener medizinische Presse*, No. 38, 1889.

CHIMAPHILA UMBELLATA AS A DIURETIC.

ABET, an interne of Cochin Hospital, has been experimenting with this old diuretic herb in that hospital. He has tried the decoction, the infusion, the tincture, and other fluid preparations; lastly, the soft hydro-alcoholic extract, only to recognize the superiority of the latter over all other preparations. The hydro-alcoholic extract is made thus: Ten ounces of pipsissewa leaves are exhausted with alcohol at 90°, and a soft alcoholic extract is got by evaporation and concentration. The leaves that had been acted upon by the alcohol are now steeped for two hours in two quarts of water; the whole is then cooled and filtered. To this filtered liquid is now added the alcoholic extract, and after all the soluble parts are extracted the whole is again filtered, and the filtrate is evaporated in a sea-bath down to the consistence of a soft extract. Ten ounces of the powdered leaves yield about three ounces of extract. This extract is given in doses amounting to from two to four drachms a day.

The formula in which the drug may be given is as follows:

Soft hydro-alcoholic extract of chimaphila . .	ʒijss to ʒiv.
Syrup of orange	℥j.
Rum	ʒijss.
Water	℥iij.

Of this preparation, a tablespoonful is given every two hours.

Experiments on animals proved that the chimaphila was not poisonous in any dose. Abet himself ingested an ounce and a half of the soft extract without experiencing any bad results. Eleven patients in the hospital were treated by this diuretic preparation. All were cardiac patients with œdema and dyspnœa, who were passing very little urine. The medicine worked well in all these cases but one; this patient was influenced by no diuretic but digitalis. The diuresis in some of these patients amounted to five quarts of urine in twenty-four hours. They took daily in potion for a month and a half from two and a half to three and three-quarters drachms of the extract. The diuresis in all cases began with the second day, and remained at this maximum till there was complete disappearance of the œdema, when the quantity of urine fell to normal.

The chimaphila seemed to have no special action on the heart.—*Boston Medical and Surgical Journal,* October 10, 1889.

EXALGINE.

Exalgine is the name given to a new derivative of the aromatic series, orthomethylacetanilid, discovered by Brigonnet, of the Cochin Hospital, and which has suddenly leaped into extraordinary favor as an analgesic in France.

It occurs either in fine acicular or long tablet-like crystals. It is sparingly soluble in cold water, more soluble in hot water, and extremely soluble in very dilute alcohol, or in water slightly alcoholated. Physiologically, it acts very much like analgesine, having, however, more effect upon the sensory and less upon the thermogenetic centres than this substance. Its therapeutic effects are obtained in doses of from four to six grains, administered at once, or from six to twelve grains taken in two doses in the course of twenty-four hours, and are powerfully analgesic, subduing the element of pain in all forms of neuralgia, including visceral.

Like all new remedies of this sort, it is at present on its good behavior, and it is claimed by DRS. DUJARDIN-BEAUMETZ and G. BARDET that it has in their hands, up to the present time, exhibited no evil sequelæ, being free from the rash, cyanosis, etc., so frequently observed after the ingestion of antipyrin and acetanilid.

Exalgine is eliminated by the urine, upon the quantity of which it exercises a marked effect, acting like the antipyretics of the same group, and diminishing the quantity of the secretion. In diabetes it also diminishes the quantity of sugar eliminated. Like all of the derivatives of the aromatic series, it is antiseptic and antithermic, as well as analgesic, and possesses the latter quality in a comparatively superlative degree, being more efficient, in doses less than half as great as antipyrin.

The following are the formulæ for its exhibition, as given by M. G. Bardet in *Les Nouveaux Remèdes:*

Antineuralgic Potion of Exalgine.

℞.—Exalgine	ʒj.
Kirschwasser	ʒx.
Simple syrup	℥j.
Distilled water	q. s. ad ℥v.

Dissolve the exalgine in the Kirsch water, and add the syrup and water. The dose is from one to three tablespoonfuls in the course of the day.

℞.—Exalgine	ʒj.
Rum	ʒx.
Distilled water	q. s. ad ℥v.

Proceed as before. The dose is the same as above.—*Medical Record,* October 12, 1889.

ESERIDINE AS A LAXATIVE.

Eseridine in chemical composition closely approaches its congener eserine or physostigmine, into which it may be transformed under the influence of heat and weak acids. According to the *Journal de Médecine de Paris*, July 14, 1889, in medicinal doses it produces marked diarrhœa, without any appreciable action on the nervous system. Its poisonous dose is six times larger than that of eserine, while it is claimed to act as a reliable laxative in therapeutic doses.—*Therapeutic Gazette*, October, 1889.

CREOLIN.

The composition of this mixture is uncertain, that is to say, the preparation made by one manufacturer is not the same as that produced by another, consequently the value of creolin as an antiseptic may vary within wide limits.

The chief constituents of the strongest make of creolin, Pearson's, are resin soap, creolin oil (hydrocarbons), pyridines, and phenols. Of these the phenols are the important antiseptic agents, and they consist for the most part of creosols.

Solutions of creolin were found to be much more active disinfectants than carbolic acid; it seems probable that phenols, indifferent aromatic hydrocarbons, and resin soap are the constituents which lend to creolin its antiseptic qualities; and further, the condition of a fine emulsion, in which creolin is used, probably contributes to its activity.—*Centralblatt für Gynäkologie*, September, 1889.

CARBOLIC ACID FOR FURUNCLES.

STAFF-SURGEON LEU, of the German army, gives the following conclusions on the treatment of furuncles, in the *Deutsche militärärztliche Zeitschrift:*

Subcutaneous injection of dilute carbolic acid is a simple and effectual abortive treatment of furuncles. Incipient furuncles which have not yet suppurated are especially adapted to the treatment. A cure results in these cases without necrosis of the connective tissue; in the more advanced furuncles which have formed pus, or are even discharging it, no deforming cicatrization follows. The proper strength of the carbolic acid is three per cent. This mode of treatment is particularly valuable in the army, because it shortens the time on the sick-list (when it is necessary to put the man on at all), and he returns to duty with a better cicatrix, while many may be treated without going to the hospital. The simplicity of the apparatus required—a subcutaneous syringe and a small bottle of carbolic solution—makes it possible to carry out the treatment anywhere and at any time; for example, during manœuvres and on the march.—*Lancet*, August 17, 1889.

ANTISEPTIC ACTION OF CHLOROFORM AND OTHER VAPORS.

DR. SEGALL has published in the *Münchener medicinische Wochenschrift*, an account of some observations in which he has been engaged, with the object of determining the amount of antiseptic action possessed by the vapor of chloroform, of formaldehyd, and of creolin. The method employed was to infect the jelly (previously liquefied) in a test tube with the particular microbe under inspection. After the infected jelly had been allowed to solidify, a small tube containing chloroform, creolin, or a ten per cent. solution of formaldehyd was suspended over it, so that the surface of the jelly should be exposed to the action of the vapor given off, the mouth of the test-tube being closed with a well-fitting plug of cotton-wool. The greatest effect was produced by the vapor of chloroform, this being found to have a nearly equal effect on all the different bacteria experimented on, these including staphylococcus pyogenes aureus, bacillus prodigiosus, and the bacilli of pneumonia, of typhoid fever, of anthrax, of cholera, etc. The upper part of the jelly remained clear and free from microbes, while the deeper layers presented evidences of the existence of numbers of colonies. In the tubes containing formaldehyd, though only in a ten per cent. solution, there was also a great difference between the superficial and deep layers; while when creolin was employed this difference was much less marked, though the antiseptic action was greater than that of the fumes of carbolic acid, which have been shown to exert no preventive action on jelly cultures of the cholera microbe.—*Lancet*, September 28, 1889.

LEMON-JUICE IN NOSEBLEED.

In a case of rebellious epistaxis, which had resisted various modes of treatment, including plugging of the anterior nares, Dr. Fauchon gave relief by the local application of lemon-juice. An injection of the juice was made by a glass syringe into the nostril from which the blood was escaping, with the result of immediately arresting the hemorrhage.—*Medical Record*, October 5, 1889.

A SIMPLE REMEDY FOR HICCOUGH.

After trying all the ordinary measures without avail, DR. LOEBL fell back upon a household remedy as a last resort, and ordered a teaspoonful of pulverized sugar wet with an equal volume of wine vinegar, to be taken at one dose. The hiccough stopped immediately and did not return for six hours, and then ceased after a second dose of the remedy.—*Medical Record*, Sept. 28, 1889.

DISINFECTANTS FOR INTESTINAL DISCHARGES.

PROFESSOR UFFELMANN has carefully tested the disinfectants which are commonly recommended for the purpose of disinfecting fecal discharges as to their reliability to accomplish this object. His results vary to some extent from the generally accepted views on this subject, though he insists upon the importance of contact with the disinfectant for a considerable time. We can hardly hope to find even the strongest agent capable of exerting its preventive qualities within a few minutes.

Professor Uffelmann's observations are limited to intestinal excretions which are in a liquid state, and do not extend to the proper treatment of discharges which have a firm consistence. He considers sulphuric or hydrochloric acid diluted with an equal or with double the volume of water, the most active. Next come an acidified corrosive sublimate solution and also potash lye. Carbolic acid in five per cent. solution does not destroy all bacilli after an hour, but kills nearly all spores after twenty-four hours' contact. Caustic lime in the proportion of 1 to 100 is uncertain in its action; in the proportion of 2.5 to 100, after twenty-four hours, it is quite reliable as a disinfectant.

In order to disinfect watery discharges and those which have a thin consistence, they may be mixed with an equal volume of the diluted acid solution; if sulphuric acid is employed two hours' contact will suffice, with hydrochloric acid twelve hours.

If a five per cent. carbolic acid solution is used, it should be allowed to act for twenty-four hours.

A solution made up of

Corrosive sublimate	2 parts.
Hydrochloric acid	½ part.
Water	1000 parts.

may be used with an equal volume of feces and allowed to exert its action for at least half an hour—better for twenty-four hours; after a quarter of an hour even typhoid bacilli are not killed.

Caustic lime in the proportion of 2½ parts to 100 parts of feces will act as a germicide in twenty-four hours. Simply pouring hot water over the discharges is useless.—*Therapeutische Monatshefte*, September, 1889.

MEDICINE.

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THE TREATMENT OF TYPHOID FEVER WITH ENEMATA OF A SOLUTION OF TANNIC ACID.

BACKHAUS (*Deut. med. Wochenschr.*, 1889, No. 29, 583) compares our helplessness in the presence of certain internal diseases caused by microörganisms with our ability to master surgical affections by means of direct antiseptic treatment; the difference resting on the fact that the microbes in internal diseases are frequently situated where it is not feasible to use antisepsis. This difficulty does not apply in such full force to affections in which the intestine is the seat of entrance of the microbes into the system, and especially when the disinfection can be applied from the rectum. The author has been led by Cantani's sucesss with injections of a solution of tannic acid in cholera, to attempt the same method in typhoid fever; the indications being to limit the growth of the bacilli, and to render harmless the ptomaines produced by them. The method employed was the injection twice daily of a warmed solution containing at first 30 grains of the acid in two quarts of water, and later